

## **Project 1 Pseudo Code for EcountryCollection Class**

### **1. buildArr()**

Initialize FileReader and BufferedReader and open Countries.txt  
While next line is not null  
    Assign line to Country Name  
    Assign line to Capital  
    Assign line to Region Name  
    Assign line to Region Number  
    Assign line to Capital Population  
Close input stream

### **2. selectionSort()**

While the outer loop is less than the number of elements  
    Minimum = outer loop index  
    While the inner loop is less than the number of elements  
        if ecountries at index inner is less than ecountries at index minimum  
            Minimum = inner index  
    Swap(out, min)

### **3. swap(int one, int two)**

Create Ecountry temp object and assign it to ecountry at index variable one  
Assign ecountry at index variable one to ecountry at index variable two  
Assign ecountry at index variable two to temp

### **4. display()**

Output the ecountries array in formatted text string

### **5. size()**

returns the number of elements

### **6. getProbeCount()**

returns the number of probes

## 7. binSearch(String s)

```
Variable lowerbound set to 0, upperbound set to the number of elements - 1
While true
    Current index is equal to lower+upper / 2; middle of the range
    If ecountries at current index country name is equal to the search key
        Return current index, you found the search key!
    Else
        If lower>upper
            return number of elements, you did not find the search key
        else
            if ecountries at current index country name is not true
                search in the upperbound
            else
                search in the owerbound
```

## 8. seqSearch(String s)

```
while index = 0 and less then the number of elements
    if ecountries at current ides country name equals the search key
        break loop
if index is equivalent to the number of elements
    return false, you did not find the search key
else
    return true, you found the search key
```